

# **Bismarck State College**

## **Learning Outcomes Assessment**

### **Summary Report for 1999-2000**

#### **Assessment Committee**

**Allen Dockter, Coordinator**  
**November 2, 2000**

## Historical Information

### School Years 1995-1998

An assessment team was formed in the fall of 1995, in response to NCA's call for all colleges and universities to put into place an assessment program. The team's role was to develop BSC's assessment plan. The resulting plan had four components: incoming assessment, in-class assessment, outcomes assessment, and the tracking of BSC graduates. In Spring, 1995 the plan was reviewed by NCA's liaison to BSC, Dr. Stephen Spenghal, who said the plan was fine but that the important work now was that of implementation; thus, the newly-formed (Spring, 1995) campus-wide assessment committee established a sequence of tasks that would ultimately lead to full implementation of the assessment plan. It seemed logical to the committee to begin in sequential order; that is, to implement Part A of the plan (incoming assessment); then to accomplish Part B (in-class assessment); then to establish procedures for carrying out Part C (program-level and general education outcomes assessment); and finally, at a point when computer technology related to HECN would support the effort, to track graduates in assessment-related ways.

Following this logic, then, the Assessment Committee spent the school year 1995-96, and the first half of the following school year, implementing the incoming assessment part of the plan. Conferring with members of the English Department and the Math Department, the committee established cut scores for math, writing, and reading and created a testing system which allowed the College to place its Freshman students more accurately into math, writing, and reading classes at levels which would encourage their success, rather than risk their failure in their first college attempts at developing and using these liberal skills. With the help of the entrance testing and good advising, students were placed into courses in which they had a good chance to succeed. The Assessment Committee felt that success in the first courses would help to insure for these students greater success in later coursework. To support this hoped-

for result, Sandy Fried was hired as BSC's first full-time testing and (incoming) assessment coordinator in September, 1997.

Based on comparative data and recommendations supplied by the Math and English departments, the Assessment Committee revised the cut scores for Fall of 1997; and similar comparative data for the 1997-98 school year showed that the incoming assessment and placement program was now fostering even higher overall learning success rates. Data began to show that the incoming assessment program was indeed having a positive effect on overall student learning outcomes. The incoming assessment program had proven itself to be a strong factor in the learning outcomes of BSC's students.

Spring, 1998 saw the Assessment Committee working to implement Part B of the assessment plan, in-class assessment. Following up on a Fall, 1997 workshop on student self-assessment techniques (CATs, as outlined by Thomas Angelo), the Assessment Committee sponsored a session in February, 1997 on additional assessment tools being tried by BSC faculty pioneers in assessment. Faculty members were invited to select tools that might work best for assessing the on-going learning in their courses.

Part C of the plan (program-level and general education outcomes assessment) was to become the Assessment Committee's focus in Fall, 1998, as the next logical progression in the developing of BSC's assessment program. In the meantime, however, in Spring, 1998, NCA consultant-evaluators, on campus for BSC's accreditation visit, faulted BSC for not having progressed with outcomes assessment; thus, it became a matter of urgency that outcomes assessment be developed and practiced before a scheduled focused visit on assessment in 2001. The committee set aside its work of developing in-class student self-assessment techniques and immediately began the third phase of the plan by contracting the services of two NCA assessment consultants, Dr. Jane Hunter and Mr. Carroll Bennett. Currently, outcomes

assessment continues to be the focus as BSC's assessment program moves toward its eventual fullness.

Part D of the plan (tracking of graduates) was tabled until such time as the HECN system would allow for accessing the needed tracking data.

Part A of the plan (incoming assessment) has been fully operational since its inception and continues to provide excellent support of learning for BSC's students.

### **School Year 1998 - 1999**

As a result of their visit to BSC in April, 1998, the NCA accreditation team recommended "the college should seek consulting advice on assessment." The Assessment Committee immediately sought advice from NCA about available and knowledgeable consultants. During the summer, Dr. Jane Hunter and Mr. Carroll Bennett were contacted to determine their availability. They expressed an interest and desire to work with BSC. Both individuals have significant experience with assessment and a long association with NCA.

These consultants worked with BSC throughout the 1998-99 school year. On two occasions, they visited with faculty on campus. The first visit was on October 26, 1998, as part of Staff Development Day and the second was a follow-up visit on March 22, 1999.

Dr. Hunter and Mr. Bennett recommended a format called a "matrix" for all programs in the vocational-technical areas as well as one for each of the five categories listed under general education requirements (Communications; Arts and Humanities; Social Sciences; Mathematics, Science and Technology; and Enrichment). Each matrix consisted of a goal statement along with five columns: competencies, measures, levels, analysis, and action. This format satisfied NCA's general institutional requirement that each institution develop clearly stated program goals with specific, measurable objectives. Since it is not sufficient to merely describe experiences that students are

exposed to, BSC needed to assess what students will be able to do as a result of that exposure. Thus, objectives state what students are able to do. The challenge to develop these matrices was not so much in the vocational-technical arena, but rather in the general education area. Vocational-Technical instructors have long been required to validate their programs; thus the assessment reporting is not a new concept for them, but rather an extension of what they have been doing all along. For many of the general education faculty, however, writing goals and objectives for their courses was a completely new idea.

Working diligently and consistently from October 1998, through May 1999, Assessment Committee members worked with faculty members to develop their matrices. The consultants worked with BSC over the course of three drafts of matrices for all general education areas. Our goal was to develop goal statements and complete the first three columns (competency, measure, level) of the matrices by May 1999 for all vocational-technical programs and the five areas of general education for the A.A. and A.S. degrees. That goal was met. Incidentally, all previous draft copies have been retained in the assessment binder and will serve as a record of the thought processes and changes that faculty went through in the assessment process.

It was noted by our consultants during their visit to the BSC campus in March 1999, that three matrices were particularly well written. Those were Communications, Arts and Humanities, and Welding. As a result, it was decided that these should serve as pilot projects, i.e., these three areas could proceed with assessment of their students and complete the last two columns of the matrices (analysis and action) prior to graduation in May. These three matrices were completed and served as examples for the fall 1999 assessment effort.

### **School Year 1999-2000**

As a result of the pilot project, the next step was for all faculty to implement their assessment measures during the fall semester, 1999. This meant that all areas in

general education were able to complete the last two columns (analysis and action) of the matrix by December 1999. Some vocational-technical areas were unable to complete the last two columns, as many of the competencies/outcomes weren't taught until the second semester of their respective programs. During the spring 2000 semester, general education and all vocational-technical programs completing their assessment. The faculty used the information gathered from these matrices to review their teaching methods. This review will undoubtedly result in changes in teaching methods and practices in an effort to enhance student learning.

A point needs to be made about the "Enrichment" curriculum. The Faculty Senate voted in the spring of 2000 to remove Enrichment as a component of BSC's General Education Requirements beginning fall 2000 semester. Therefore, enrichment will no longer be part of our assessment efforts and will not have an assessment matrix.

During 1999-2000, BSC's General Education Committee was given the task of re-writing the College's philosophy statement on general education. After the new statement was approved, the College made some changes in the list of general education courses, to align the list with the new philosophy statement. The adjusted general education course list was printed in the 2000-2001 BSC catalog and the assessment of the general education courses will be similarly adjusted in 2000-2001.

## **Summer and Fall, 2000**

On May 15, 2000, a conference call with Dr. Karen Kietzman, NCA liaison to BSC, was held. During the conversation, she expressed concern about the progress on assessment. After a campus visit on June 8, 2000 by Dr. Kietzman and a review of all materials that were used in the assessment process, she was satisfied with the progress being made. Dr. Kietzman agreed that some changes would help to solidify the assessment process.

As a result of the consulting visit by Dr. Karen Kietzman, the Assessment Committee reviewed what had been done and made some changes to the assessment process. A key change was the elimination of the “Levels” column of the matrix, following Dr. Kietzman’s recommendation.

The summer of 2000 was dedicated to the development of a Faculty Handbook on Assessment. Some items included in the handbook were:

- Overview of assessment at BSC
- Key assessment terms
- BSC’s approach to outcome assessment
- Outcomes assessment reporting process
- Faculty assessment report
- Chart of semester assessment activity
- Assessment timetable
- Sample report forms.

Two books were purchased to serve as aids in the assessment process. The first was *Effective Grading* by Barbara E. Walvoord and Virginia Johnson Anderson, with every assessment committee member receiving a copy. In addition, the department chairpersons and the library also were given a copy. The second book, *Learner-Centered Assessment on College Campuses* by Mary E. Huba and Jann E. Freed, was purchased for members of the Assessment Committee and the Department Chairpersons.

Terminology has become an issue on campus. The Assessment Committee has developed some specific terms that need to be used campus wide. It becomes very confusing if different terminology is used in the college catalog and in the Faculty Assessment Handbook. A goal for the Assessment Committee is to use the same terminology throughout the institution. For example, the term “**Program**” is to be used as a prescribed curriculum that leads to an A.A.S. degree, diploma, or certificate. The

term “vocational-technical” to describe these prescribed curricula should be eliminated on campus.

The Assessment Committee also developed new matrices for assessment. They include the following:

- Faculty Group and Program Assessment Plans
- Faculty Group and Program Assessment Reports
- Faculty Assessment Report
- Multiple Measures Matrix
- Curriculum Matrix

The faculty group leaders will be asked to report the spring 2000 semester results on the new matrices to determine their workability. This will be done the first few weeks of the fall 2000 semester.

## **Summary of General Education Assessment for 1999-2000**

**1. Arts & Humanities** - All thirteen members of the Arts and Humanities Faculty Group submitted assessment samples. The learning activity/assignment descriptions that were submitted by faculty on their Assessment Commitment forms reflected a wide variety of measurement tools, in the form of student performances and products, including formal essays, responses to films, oral presentations, musical performances and creative works of art. A look at the statistics in the “Results” column of the matrix reveals that the level of achievement on the direct measures increased during spring, 2000 by a small percent for all three competencies over the level of fall 1999.

**2. Social Sciences** - All seven members of the Social Sciences Faculty Group submitted assessment samples. The learning activity/assignment descriptions that were submitted by faculty on their Assessment Commitment forms reflected a wide variety of measurement tools, in the form of student performances and products,



including formal essays, responses to films, oral presentations. A look at the statistics in the "Results" column of the matrix reveals that the level of achievement on the direct measures increased during spring 2000 by a small percentage for all three competencies over the level of fall 1999.

**3. Math, Science and Technology** – The faculty group reported using many different direct measures in their respective classes. The most commonly used measures were faculty-developed pre-tests/post-tests; word problems, performance evaluation and essays. Results of direct measures indicated that a wide range of learning took place in the various classes. Many faculty members plan to make changes as a result of the measurements. In Math 210, more time will be spent on statistical inference and less time on probability. Math 103 will offer more practice problems and extra help sessions. Science classes place greater emphasis on the role of science in everyday life.

**4. Communications** - In spring 2000, the writing faculty focused assessment activities on graduating sophomores enrolled in English 120 (24 students). An essay written at or near the end of the semester was evaluated on a 5-point scale, based on 8 different criteria of effective writing. The results were consistent with spring 1999 results. In Spring 2000, the speech faculty focused on a sampling of students from Speech 110 classes. Listening skills were assessed with critical listening activities. Speaking skills were assessed based on students' preparation and delivery of a speech to persuade in the second half of the semester. Apprehension about speaking was assessed with the Personal Report on Public Speaking, given at the beginning and end of the semester to students in the speech fright section of Speech 110. The results were consistent with fall 1999 results.

### **Summary of Program Assessment for 1999-2000**

- 1. Administrative Assistant/Medical** – The program established their competencies and used direct measures in the classroom. 85% or more of the students assessed mastered the competencies. Plans for improving student

performance on these competencies include using flash cards, more transcription tapes, and more graphic pictures and handouts on the skeleton.

2. **Administrative Assistant/Legal** – The program established their competencies and used direct measures in the classroom. Over 90% of the students assessed mastered the competencies. The current assessment was too difficult to evaluate and didn't give the results needed for improvement. A revision of the competencies will be made. Employee Progress Reports were used as an indirect measure for evaluating interpersonal skills.
3. **Administrative Assistant/General** - The program established their competencies and used direct measures in the classroom. In direct measures, 85% or more of the students attained a score of 70% or more on the assessment instrument. Changes planned in the assessment process are to do more pre-test timings and post-test timings and to pre-test and post-test on punctuation and capitalization. An indirect measure used was an Employee Progress Report evaluating interpersonal skills.
4. **Computer Support Specialist** - The program established their competencies and used direct measures in the classroom. In direct measures, 78% or more of the students attained a score of 70% or more on the assessment instrument. Changes planned are to improve review sessions before tests to clarify topics.
5. **CIS Information Processing Specialist** - The program established their competencies and used direct measures in the classroom. In direct measures, 50% of the students attained a predetermined score of 80% or more on the assessment instrument for technical knowledge and 31% of the students taking the industry test passed. Changes planned are to assess two core competencies in each course, to require all students to purchase exam-prep materials, and to review 1 week prior to the MOUS test. Four indirect measures are used to

assess the program: Employer Surveys on knowledge and application skills, Student Follow-up Surveys on knowledge and applications skills.

6. **Welding** – The program used State Board for Vocational Education-approved profile pre-test and post-test exams for their direct measures. 100% of all completers had at least a 30% improvement of their score on the post-test. All completers had at least an 80% score on SBVE-approved exams. 100% of the completers received certification and completed state curriculum requirements. The American Welding Society National Certification Test, the Employer Survey, and Student Program Assessment Survey were used as indirect measures.
  
7. **Agricultural - Sales and Service** – The program used pre-tests and post-tests for direct measures of competencies. 84% of all students received an Average or above in the required competencies. For indirect measures, the department used a Student Survey and an Employer Survey with 100% of respondents indicating a satisfaction level of Average or above. Plans for improvement are to continue to work with the advisory committee and agricultural groups to keep curriculum in pace with industry needs. 100% of students completed the internship program.
  
8. **Agricultural - Farm and Ranch Management** – The program used pre-tests and post-tests for direct measures of competencies. 84% of all students received an Average or above in the required competencies. For indirect measures, the department used a Student Survey and an Employer Survey with 100% of respondents indicating a satisfaction level of Average or above. Plans for improvement are to continue to work with the advisory committee and agricultural groups to keep curriculum in pace with industry needs. 100% of students completed the internship program.
  
9. **Air Conditioning, Heating and Refrigeration** – A direct measure of a pre-test and a post-test was used for all competencies. The range of improvement was

from 22.59% to 36%. The pre/post test is being reevaluated. The EPA section 608 National Certification Test was administered with 78.5% of students receiving at least one level of certification. The Advisory Committee validated task list was used as an indirect method of assessing, with 92% obtaining a #3 rating and 100% received a #2 or better rating. Employer and Graduate Surveys were also completed. A new survey will be implemented in the fall of 2000.

**10. Auto Collision Technology** – A direct measure was used within the class, and 88% or more scored above 75% on all competencies. An Employer Survey on competencies was conducted, and as a result of that survey, more emphasis will be placed on the areas of structural damage and mechanical and electrical components. In the Graduate Survey, 95% of students were satisfied with the program preparing them for employment, while in the Employer Survey, 80% of employers said the program prepared students adequately for employment. Students are meeting the standards for NATEF.

**11. Automotive Technology** – Direct measures used in the program were a pre-test/post-test and the Automotive Service Excellence End of Program Test (ASE). BSC students were in the 83<sup>rd</sup> percentile or above in all systems except in Brakes, where they scored in the 56<sup>th</sup> percentile. In the pre-test and post-test measure, students' gain ranged from 27% to 57.7% in the different systems. Employer and Graduate Surveys were conducted with 62% to 88% of employers indicating that the program adequately prepared the students in the different systems. Data for Graduate surveys are not valid since only one graduate returned the survey. Outcomes of the assessment were that instructors need to spend more time in lab on electrical and brake systems. The program also needs to send the Graduate Survey out earlier and do follow-up on the graduates who did not return a survey.

**12. Residential Carpentry** – The program used the National Center for Construction Education and Research National Registry (NCCER) written test as a direct measure. The percentage of the students who passed all areas on the NCCER

written test range from 96% to 100%. The Indirect measure of Employer Survey indicated an 80% satisfaction in Interior Finish and Cabinetry and a 100% satisfaction in all other areas. 100% of students completing the Graduate Survey indicated they felt adequately prepared for the job market.

13. **Commercial Art** – The program used a Juried Portfolio Review for their direct measure. The Advisory Committee, student peers, and faculty were used for the review. 82.97% of the reviews resulted in a favorable rating. Plans are to continue with the advisory committee to review, to improve the judging criteria and the assessment vehicle, and to keep the curriculum current with industry. Plans are to improve direct measures of specific classes.
14. **Electronics Technology** – The program used a pre-test and a post-test for the total program. The pre-test was given in the fall of 1999, with an average score of 27.8%. The post-test will be given spring 2001. An Employer Survey was conducted, with 100% of employers indicating the program adequately prepared students for employment. In a Graduate Survey, 83% of the students responding indicated the instruction received was above average. Plans are to improve direct measures of specific classes.
15. **Adult Farm Management** - The direct measure used was completing a calendar year farm record and getting it analyzed using FINPACK year-end Farm Business Analysis. All students completed the analysis adequately. The program used a Student Survey for its indirect measure with 98.4% indicating an above average satisfaction with the program.
16. **Lineworker** – A pre-test and post-test direct measure was used, with 96% or more of the student showing adequate improvement in the post-test. A Student Post Semester Survey showed that 96% of the students reported that adequate knowledge was attained. An Employer and a Graduate Survey were conducted with results not available at the time of this report.

**17. Management** – The Indirect measures used were employer assessment, intern evaluation, and student follow-up. All students maintained a minimum of Average on the employer assessment. 75% obtained a “very good” rating. The Student Follow-up Survey indicated 85% obtained a “very good” or above rating in all areas measured. The program did not use any direct measures. Plans are to incorporate direct measures in the future.

**18. Power Plant Technology** – The department and Advisory Board designed a pre-test and a post-test. Over 80% of the students passed the post-test, with the increases in scores from the pre-test ranging from 14% to 65% in the different areas assessed. The program conducted an Employer Survey, with over 70% of employers indicating that students were adequately prepared for the workforce. The Graduate Survey conducted showed that over 80% of the graduates felt they were adequately prepared.

**19. Process Plant Technology** - The department and Advisory Board designed a pre-test and a post-test. Over 80% of the students passed the post-test with the increases in scores from the pre-test ranging from 14% to 65% in the different areas assessed. The program conducted an Employer Survey, with over 70% of employers indicating that students were adequately prepared for the workforce. The Graduate Survey conducted showed that over 80% of the graduates felt they were adequately prepared.

Programs not assessed in the 1999-2000 school year were Surgical Technology, Phlebotomy Technician, Clinical Laboratory Technician, and Engineering Aide. These programs will be assessed in 2000-2001.

## **Goals of the Assessment Committee for 2000-2001**

- Assess every course under general education for an A.A., A.S. or A.A.S. degree
- Assess every program as listed in the college catalog
- Provide in-service on assessment on Faculty Orientation Day on August 28, 2000
- Provide in-service on Faculty Development Day on October 23, 2000
- Plan an assessment workshop for in-service on Employee Development Day
- Complete all assessments and prepare a 2000-2001 Annual Assessment report for BSC and a self-study report on assessment for NCA

Faculty members' understanding of and appreciation for assessment continue to increase each semester as they see the positive impact assessment has on teaching, learning, and curriculum development. Anytime a new idea is introduced that affects an entire campus, particularly one requiring significant additional work for faculty, it takes time to bring that idea to fruition.

**Recommendations for consideration by the institution's planning and budgeting groups.**

- Bring in an expert in the field of critical thinking to conduct a workshop on techniques for teaching critical thinking, creative thinking, and interpretive thinking for all BSC faculties.
- Encourage some faculty to attend a regional or national critical thinking seminar and bring back ideas and materials for the whole group.
- Provide faculty members or departments with books that provide practical how-tos for teaching higher-level thinking skills.
- Examine the general education curriculum to determine what critical thinking and creative/interpretive thinking skills are taught, so that faculty can begin to see where the gaps are and how to fill them.
- Plan a session for group members to share their definitions of interpretive thinking and creative thinking and to work toward common PTA scales that could be used as a direct measure across several disciplines.
- Establish mentor relationships among faculty in the disciplines to foster individual growth in teaching the higher level thinking skills.
- Conduct a "poster session" to share PTA's for interpretive thinking within specific disciplines.
- Start compiling a list of critical thinking skills commonly taught in BSC's social and behavioral science courses. (The beginning list: deductive/inductive reasoning, cause/effect, analyzing variables, synthesizing, transferring learning, levels of complexity).
- Free up some time for faculty to think so that they can become more creative with learning activities to enhance critical thinking--possibly through elimination of certain meetings.
- Enlarge the faculty membership on the Assessment Committee to lighten the load for faculty group reports.
- Send Assessment Committee members to regional and national workshops or seminars to stay abreast with assessment.



## INCOMING ASSESSMENT OF STUDENTS AT BSC

Although incoming assessment is not a required component for overall assessment as viewed by NCA, the BSC Assessment Committee considered incoming assessment a very important part in the support of student learning outcomes for BSC students.

There are two major areas of incoming assessment; placement scores in math, English and reading in general education and entry-level placement scores for the Limited Enrollment Vocational-Technical Programs. This report addresses the ongoing changes made in each area.

### **Progress report of BSC Placement Scores in General Education.**

#### **Initial Assessment Scores – Fall 1997**

The BSC Assessment Committee and respective departments implemented the initial placement scores in fall 1997. The BSC placement scores were developed for the purpose of course placement in English (writing), mathematics, and reading.

#### **Revised 6/98 Assessment Scores - Fall 1998**

English Placement Scores. Through studies of past records, the English faculty found that students with ACT scores 13 to 21 would more than likely pass English 110 with at least a “C”, but would still exhibit problems with grammatical structure. Based on these findings, students who scored 13 to 21 on the ACT, would enroll in English 110, but would also be *required* to register for the ASC 099 Writing Center Lab. The 099 Writing Center Lab is a one semester, zero credit lab that awards a satisfactory or unsatisfactory grade. Students, who demonstrated proficiency after being assessed by their English 110 instructor during the first week of class, have the option of testing out of the lab with the consent of the English 110 instructor and the Coordinator of the pre-college English courses and Labs.

Math Placement Scores. For the Fall 97 and Spring 98 semesters, students who completed the COMPASS math assessment exam were reported as “Placement Only.” This option indicates a range or determines a category of numbers in which the student would fall for course placement purposes.

In June 1998, the Math Department and Testing and Assessment Coordinator reevaluated the need for an exact measure of performance for each student completing the COMPASS math assessment. Consequently, the COMPASS Math Full-Score Report was implemented. Although this exam is considerably longer in length, the benefits will assist in fine-tuning course placement scores and providing BSC advisors with accurate information to assist students in appropriate course choices. The placement scores were developed with the help of Dr. John Roth, from Educational Services at ACT. Dr. Roth used our current ACT placement ranges to recommend comparable COMPASS score ranges.

### **Revised 5/20/99 Assessment Scores - Fall 1999**

English Placement Scores. With the completion of the 1998-1999 academic year, student outcome data was gathered and reevaluated with the following conclusions. Those students completing the pre-college English course, College Writing Prep, were adequately prepared for the transition into College Composition I. Those who were initially placed in College Composition I, based on an ACT or COMPASS assessment, did "A" to "B" work as predicted.

The data also revealed some potential problems.

1. Those students who scored below 11 on the ACT had a very difficult time developing skills that would allow them to succeed in College Composition I.
2. Students who scored 13 -14 on the ACT, did not succeed as well in College Composition I, earning an average 1.86 G.P.A. in College Composition I.
3. Students who scored 18 - 21 on the ACT did not need to complete the entire Writing Lab course.

Based upon the above information, the English department implemented a 5-tier course placement sequence to better suit the needs of current BSC students. The implementation of the English 086 – Writing Basics course, will be piloted to see how it benefits those students scoring below 11 on the ACT, and the ASC 099 – English Writing Lab (Self-Paced) will be used for those students scoring between 18 and 21 on the ACT, who do not need the full Writing lab course. Unlike in previous semesters, students will no longer have the option to test out of the writing lab, unless they have successfully completed the Business English course sequence, BOTE 121, 122 and

210. In conjunction with the new 5-tier course placement sequence, online and ITV English course placement requirements were also implemented. Any student enrolling into English 110 via online or ITV must meet assessment requirements by completing the ACT English exam with a 22 or higher, COMPASS English exam with an 86 or higher or ASSET English exam with a 46 or higher. Those students enrolling online who do not have access, within a reasonable distance, to ACT, COMPASS or ASSET will be allowed to complete a writing prompt. It will be the students' responsibility to find a valid proctor. The writing prompt correspondence will be handled by the BSC Testing Center and upon completion be forwarded to the Coordinator of the pre-college English courses and Labs in the English department for grading.

Reading Placement Scores. In February 1999, ACT completed a "Concordant ACT assessment, COMPASS and ASSET Scores" report. The tables included in this report can be used to compare ACT assessment scores to COMPASS scores. Estimates used on this report are based on the test scores of students who took both ACT and COMPASS between January 1994 and July 1998. The Testing and Assessment Coordinator, Effective Reading Instructor, and the Sykes Student Success Center used these charts along with the data accumulated from the 082 - Effective Reading course to make some minor changes to the COMPASS scores. With these changes, the COMPASS scores will correlate more closely to the ACT scores.

Math Placement Scores. Based on the information derived from the ACT "Assessment Course Placement Service Report" for Fall 1997 and Spring 1998, ACT math placement scores have proven to be a reliable tool in placing students in BSC math courses. Unfortunately, however, the number of students completing the COMPASS math assessment and enrolling in a math course was low. Therefore, the Math Department accumulated only small amounts of data from students not taking the ACT. From the small number of student outcome data collected, a suspicion arose that the COMPASS math score ranges were somewhat higher than what was set for ACT. With the use of the data supplied by the Math Department and the concordance tables established by ACT, we found that the COMPASS math scores were higher. As a result, the COMPASS math score ranges were adjusted to closer reflect what has proven to be comparable with the ACT score ranges.

### **Revised 10/18/99 Assessment Scores - Spring 2000**

English Placement Scores. Minor changes to reflect common course numbering were implemented for the spring semester of 2000. The changes are in reference to the course #, course title and credits of the English Writing Lab. What was once referred to as the ASC 099 – English Writing Lab, taken for 0 credits has now been changed to ASC 088 – Composition Lab and is awarded 1 credit.

Upon completion of the first ASC 086 – Writing Basics pilot course, assessment data was collected and reviewed. Of the 8 students enrolled in Writing Basics, seven (88%) were successful. All seven continued on to enroll in English 110 – College Composition I, with four (57%) students successful earning an A, B, or C grade, 2 unsuccessful (D, F, W) and one pending. The percent of students who, over the past 3 years, successfully completed 087 College Writing Prep and English 110 was statistically equal to those successfully completing 086 Writing Basics and English 110. Therefore, it was decided to discontinue the Writing Basics course for Fall and Spring 2000 semesters. Review of incoming assessment scores for the Class of 2001 will determine there is a need to offer English 086 Writing Basics for the Fall 2001 semester.

Reading Placement Scores. No Change.

Math Placement Scores. No Change

### **Revised 6/20/00 Assessment Scores - Fall 2000**

English Placement Scores. No Change

Reading Placement Scores. No Change

Math Placement Scores.

In December 1999 ACT upgraded the COMPASS assessment software from DOS to Windows. With this upgrade came a few changes in the math placement exam routing rules. Due to the routing change, the Algebra domain placement scores, which previously were 0 – 25 Math 092 Beginning Algebra and 26 – 35 Math 092 Beginning Algebra or Math 102 Intermediate Algebra were revised to 0-50 Math 102 Intermediate Algebra.

Math 103 – College Algebra was offered online for the first time in the Fall 2000 semester. Students enrolling in the online course must meet minimum assessment

score requirements before enrolling. The scores can be obtained by completing an ACT Math exam with a 19 or higher, COMPASS Math Exam (Algebra Domain) with a 51 or higher or successfully completing Math 102 Intermediate Algebra with a “C” or higher. Those students who do not have access, within a reasonable distance, to ACT or COMPASS will be allowed to complete the MAA (Math Association of America) exam. This exam is a paper-pencil exam used previously by the Math department for course placement. The exam will be administered in a controlled environment, placing the responsibility on the student to find a valid proctor.

## **Progress Report of Placement Scores for Limited Enrollment**

### **Vocational-Technical Programs**

#### **Initial Placement Scores - Fall 1998**

The placement scores were developed to reflect the probability of academic and employment success. Before implementing the initial placement scores, each vocational-technical program spent time reviewing previous data collected, including items, such as, previous ACT scores, program G.P.A.'s, graduation rates and reading levels of textbooks. Each program designated placement scores for both the ACT and COMPASS placement exams. Some programs decided to implement a composite placement score, whereas others chose placement scores in specific areas, such as math or English. The enforcement of these placement scores began with students who enrolled the fall 1998 semester, specifically those applying for admission after January 1, 1998. Those students applying before January 1, 1998 were grandfathered in.

#### **Revised placement Scores - Fall 1999**

In November 1998, almost a year later, respective programs once again reviewed placement scores. Even though it was very early in the process, and no substantial data was yet collected, the Air Conditioning, Heating and Refrigeration program discovered a better correlation between the ACT Math and Reading scores than the ACT composite score. As a result, the ACT composite placement score of a 14 was changed to an ACT math score of a 15 and Reading score of a 14

## **Revised Placement Scores - Fall 2000**

Each Limited Enrollment Vocational-Technical program was provided progress charts showing student placement scores, graduation/completion rates and G.P.A's then asked to respond to a set of questions. The questions are as follows:

1. Given your students completion/success rates, are you satisfied with your current cut scores? Explain Briefly.
2. Is there a need to change cut scores based on the data?
  - a. Raise or lower current cut scores?
  - b. Add/Delete score categories (i.e. Math, English, Reading, Composite)?
  - c. Change developmental course requirements?
3. Are there any other pretests that could be administered to prospective students? (ie. Computer Skills Exam)

In summary, all of the programs except Automotive Technology were satisfied with their current cut scores and did not see the need to raise/lower, add/delete cut scores and cut score categories or change pre-college course requirements.

The Automotive Technology Department found that those students who met cut score requirements on the COMPASS reading exam were still having a difficult time with course material, but at the same time did not need a math skill level of Intermediate Algebra. Consequently, the Automotive Technology Department increased the COMPASS reading score to 75 and decreased the COMPASS math skill level to Beginning/Intermediate Algebra.

Items that will be research for Fall 2001 include a Geometry placement exam for Air Conditioning, Heating and Refrigeration and an exam that measures motivational skills.

In June 2000, assessment requirements were also established for the online Power/Process Plant Technology program. Every student enrolling in this program must meet assessment requirements by completing the ACT math exam with a 16 or higher, COMPASS math exam, Pre-Algebra Domain 41 or higher, Algebra Domain 30 or higher or provide proof of current employment in the Power/Process field. Those students who do not have access within a reasonable distance, to ACT or COMPASS

will be allowed to complete an in-house math exam developed by the Power/Process Plant Department. All placement scores are valid for 5 years.

### **Summary of Responses by Program**

Question 1- Given your students completion/success rates, are you satisfied with your current cut scores? Briefly Explain.

Question 2 – Is there a need to change cut scores based on the data?

a.)Raise or lower current cut scores?

b.)Add/Delete score categories (math, reading, English, Composite)?

c.)Change developmental course requirements?

Questions 3 – Are there any other pretests that could be administered to prospective students? (i.e.Computer Skills Exam)

### **AIR CONDITIONING, HEATING & REFRIGERATION**

#1 – Yes, of the few people who had lower scores under our cut scores, most did sufficiently well. Some dropped out, but that was due to lack of motivational skills.

#2 - a.b.c.– No change

#3 – I would like to see something on a construction-based math, specifically some geometry test, since that is mainly the type of math we use.

### **AUTOMOTIVE TECHNOLOGY**

#1 – No, students testing out on the COMPASS for reading seem to be having a difficult time with course material. Math could be lowered.

#2a – Yes, raise reading score to 75, lower math to Beg/Intermediate Algebra

b & c. – No changes

#3 – No

### **AUTOMOTIVE COLLISION**

#1 – Yes I am. With the cut score as they are, it seems that we have a good success rate.

#2 a,b,c – Leave it the way it is.

#3 – No

### **CARPENTRY**

#1 – Yes, the students are able to complete the work and achieve their learning objective.

#2 a,b,c – No changes

#3 – No

### **COMMERCIAL ART**

#1 – Yes, seems to be working so far.

#2 a,b,c – No – OK

#3 – No – OK

## **ELECTRONICS**

#1 – Yes

#2a,b,c – No

#3 – No

## **HOTEL-RESTAURANT MANAGEMENT**

#1 – Cut Scores are fine. Completion rate could be better.

#2a – I think we are OK. Certainly can't go lower. Lower scores would require a personal interview.

b & c – Keep as is.

#3 – I am open to suggestions. Is there a test that measures motivation?

## **LINEWORKER**

#1 – Yes, it appears that regardless of cut scores, if the student is adamant about completing the program they will do what it takes to get through.

#2 a,b,c – No Change

#3 – No

## **POWER/PROCESS PLANT TECHNOLOGY**

#1 – Yes

#2a,b,c – No

#3 - No

## **WELDING**

#1 – Yes, As data indicates students are not completing general education requirements

#2a,b,c - No Change

#3 – No